

REMARKS

The above preliminary amendment is made to insert an abstract page into the application, to cancel claims 1-64 and to enter new claims 65-138.

For the purposes of clarity, the Applicant provides the following table as a guide for the subject matter of the new claims 65-139, compared with the subject matter of the old, cancelled claims 1-64. This table is merely for convenience, and is not intended to be limiting in any way.

General correlation

New claims	Old (cancelled) claims
65	1 + 13
66-71	14-19
72-90	2-12
91-121	20-44
122	50 + 13
123-130	51-58
131	60 + 13
132-134	61-63
135-139	45-49

The three independent claims 65, 122, and 131 originate from original independent claims 1, 50, and 60, respectively, wherein all three claims 65, 122, and 131 also include the content of original claim 13. Original claims 59 and 64 are not in accordance with U.S. claim drafting conventions, and are therefore cancelled. No new matter is added.

In view of the office action dated March 31, 2003, several of the Examiner's remarks are addressed here. As per the Examiner's suggestion, the invention is retitled, "Multi-point electrical probe for testing location-specific electrical properties on circuit boards".

In light of the Examiner's rejections in the office action dated March 31, 2003, it is instructive to show that all of the independent claims 65, 122 and 131 are neither anticipated by nor obvious in view of U.S. Patent No. 4,520,314 ("Asch").

Asch discloses a probe head arrangement for contacting a plurality of closely adjacent conductor lines 2 on a part under test. On a probe head 3, a plurality of fingers 4 together with a back 5 are made in one piece of monocrystalline silicon that has been doped to be highly conductive.

Claims 65, 122 and 131 all recite a second multitude of conductive electrodes positioned between and insulated from the conductive probe arms, particularly suitable for active guarding. Note that active guarding of the conductive probe arms significantly reduces leakage resistance and, consequently, increases the measuring accuracy of the tester. (specification of the present invention, page 19, lines 7-9)

Asch fails to disclose a second multitude of conductive electrodes positioned between the conductive probe arms. Because Asch makes no mention of a second multitude of conducting electrodes, not all the elements recited by the independent claims are taught by Asch, and any potential rejections under 35 U.S.C. 102(b) of independent claims 65, 122 and 131 are traversed.

Similarly, there is nothing present in Asch to suggest adding a second multitude of conducting electrodes. One skilled in the art would not be motivated to add a set of electrodes located between and electrically isolated from the conducting fingers, which are sized and spaced on the order of 10 microns (see table at top of column 4 in Asch). Indeed, one skilled in the art would not be motivated to add any electrically insulated features at all to Asch, which specifically uses silicon fabrication techniques and doping with boron to create a unitary, electrically conducting probe head with fingers (column 4, line 48 – column 5, line 40). Because nothing in Asch would suggest to one skilled in the art a second multitude of conductive electrodes positioned between and insulated from the conductive probe arms, not all the elements of claims 65, 122 and 131 are taught or suggested by Asch, and any potential rejections under 35 U.S.C. 103(a) of independent claims 65, 122 and 131 are traversed as well.

Applicant respectfully requests that this preliminary amendment be entered into the record prior to calculation of the filing fee and prior to examination and consideration of the above-identified application.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicant's attorney of record, Michael B. Lasky at (952) 253-4106.

Respectfully submitted,

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